



newsletter on
life-cycle tools,
management and
product policy.

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on
the
inside

- 2 Objectives of the Meeting
- 3 The Meeting
- 3 Areas of Discussion
- 7 Conclusions

Report on the Expert Meeting on Product- and Supply Chain- Focused Policies and Tools for Sustainable Development

This special edition of *Ecocycle* is a summation of the results of the Expert Meeting on Product- and Supply Chain-Focused Policies and Tools for Sustainable Development held in Ottawa, February 13-15, 2000.

The meeting was convened to explore the importance of a growing set of policies and tools that use products as a focal point for improving the environmental and economic performance of industry. Examples of these approaches include eco-efficiency, extended producer responsibility, integrated product policy, life cycle assessment, design for the environment and green procurement.

The Toxics Pollution Prevention Directorate of Environment Canada spon-

sored the meeting, which was the first multi-stakeholder consultation held on this subject in Canada. Unique in its approach, the meeting was the culmination of an innovative consultation process that involved in-depth interviews with many of the experts prior to the face-to-face discussions.

editor's column

The background paper released before the meeting, which includes an overview of the issues, is available from Environment Canada by calling 819-953-9246 or by e-mailing ecocycle@ec.gc.ca.

Background

In a growing number of OECD countries, products and their associated supply chains are increasingly becoming a focal point for environmental policy. These policies include the promotion of eco-efficiency, voluntary and regulatory extended producer responsibility (EPR) programs, and initiatives that promote the adoption of environmental considerations in product design. In jurisdictions where product policy has matured, there is now a trend toward examining more comprehensive policy frameworks such as integrated product policy (IPP). IPP refers to a public policy that explicitly aims to modify and improve the environmental performance of product systems.

In conjunction with this new policy direction, academics, industry and government research organizations have developed a growing set of tools to assist organizations in examining the environmental aspects of products and product systems. Many companies are using these and

other product-focused tools to realize business and environmental benefits. To explore the potential relevance of these product-focused policies and tools for Canada, Environment Canada convened a group of experts from a cross section of Canadian society.

Objectives of the Meeting

- Convene experts to examine product- and supply chain-focused policies and tools such as IPP, eco-efficiency and EPR;
- Develop consensus (if possible) regarding the importance of product- and supply chain-focused policies and tools in the Canadian context, especially as they relate to sustainability, innovation and competitiveness; and
- Recommend possible policy directions for the federal government, while acknowledging diverging views.

publisher's message

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The Meeting

The meeting was opened by the Honourable David Anderson, Minister of the Environment. In total, over forty experts — representing a broad range of industrial sectors and stakeholder groups — were in attendance. In his address to the participants, Mr. Anderson reminded them that producer responsibility, eco-efficiency and sustainable production are concepts that are complementary to, yet subtly different from, pollution prevention. They offer ways to integrate environmental thinking into every aspect of decision-making with regard to product development, production and use. “As a global

society,” Mr. Anderson stated, “we have to find ways to produce and consume intelligently, and adopt life cycle systems thinking. Companies that can advance us toward this goal will do very well indeed.”

Presentations by Gary Davis, University of Tennessee, Gordon Lambert, Suncor Energy Inc., Jean-Cinq Mars, OECD, Environment Directorate, Derek Smith, Ernst and Young (U.K) and Stuart Hart, University of North Carolina, followed to help focus the debate and to explore the issues in more depth.

Areas of Discussion

Macro-level Policy Linkage

Almost all of those who participated in an interview process held prior to the meeting indicated that product policies and tools were of medium to high relevance for their organizations. In addition, they felt that a gap exists between our current policy “toolbox” and what is required to move Canada toward sustainable development. According to the majority of these experts, product- and supply chain-focused policies and tools (PSPT) may have a role to play in filling this gap but product policy should be considered in context of other approaches and within an overall strategy for sustainable development. Some raised a concern that in the absence of such a strategy it was difficult to place a priority on product policy relative to other issues.

The Five Areas of Discussion

- Are product-focused policies and tools linked to macro-level policy issues such as competitiveness and innovation, and can they help governments design more effective environmental policy?
- What are the main drivers and barriers for adopting product-focused policies and tools?
- What is the current capacity, activity and awareness related to advancing product-focused policies and tools for sustainable development?
- What new data, information and partnerships are needed when adopting a product approach?
- What are the appropriate policy mechanisms and tools needed?

It was also felt that, if developed and managed correctly, PSPT could contribute not only to the design of more effective environmental policy but also to maintaining industrial competitiveness, and stimulating economic and environmental innovation. Sources of this link include:

- Product- and supply chain-focused policies and tools such as eco-efficiency and life cycle assessment which can help improve industry performance and help maintain market access;
- The fact that product and supply chain approaches can help ensure that environmental policy does not shift environmental impacts from one media to another or from one stage in the product life cycle to another; and
- The integrative nature of product- and supply chain-focused analysis can result in better linkages between industrial and environmental policy.

"Sustainability is one of the central strategic issues of our times. In fact, many have argued that is the central strategic issue of our times."

The Honourable David Anderson
Minister of the Environment

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February 14, 2000

Drivers and Barriers

The experts identified drivers that appear to be directing governments and industry towards PSPT. The significance of these drivers and how fast they will influence policy and decision-making is not yet clear, especially in terms of their implications for Canada. Barriers to the adoption of product-focused approaches were also identified. The most important of these drivers and barriers are as follows:

Top Five Drivers

- International and domestic government policies and programs such as product take-back programs, extended producer responsibility initiatives, eco-labeling and green procurement. Domestically, these types of initiatives are relatively small but they are growing internationally resulting in increasing requirements to meet international standards for those companies that export.
- Waste generation and difficulty in siting disposal facilities.
- Fiscal policies and programs that provide incentives and disincentives.
- Social license to operate.
- Customers' environmental expectations (e.g. car manufacturers requiring their suppliers to be ISO 14001 certified).

Top Five Barriers

- The current tax system, which is not designed with product and supply chain perspectives in mind and, therefore, may be providing disincentives for more efficient use of products.
- An unclear definition of the problem/issue.
- Current purchasing practices/codes/attitudes (e.g. against secondary materials, lowest bidder selection, budgeting constraints).
- Existing reporting systems, which do not measure progress towards goals.
- Unnecessary disincentives toward recycling (e.g. paper work).

Current Capacity, Activity and Awareness Related to Advancing PSPT for Sustainable Development

The experts believed that there is a general lack of activity and awareness of PSPT within industry, the federal government, the public and the post-secondary educational system. Although in

some institutions and companies the ability (i.e. the minds and the infrastructure) exists to understand and implement product-focused approaches, there are few incentives to mobilize this capacity. This lack of activity and awareness can be attributed to a number of factors including:

- a comparative lack of immediate market drivers for many companies, particularly those who do business only nationally or within the NAFTA region;
- reduced resources for research and development which have been reflected in decreased inter-disciplinary collaborative research amongst stakeholders;
- a lack of adequate cooperation amongst key federal departments;
- not enough information regarding the environmental aspects of product systems within the secondary and post secondary educational systems;
- a continued focus of governmental policy on facility-focused, media-specific and substance-based approaches to environmental issues; and
- PSPT's general lack of priority within government research and funded programs.

The actions required for raising awareness and understanding of PSPT will be dependent on a number of factors. These factors include: understanding how PSPT fits into an overall governmental and industrial environmental strategy; the degree to which PSPT can be linked to competitiveness and innovation; the market drivers being experienced by different industrial sectors; and the financial and intellectual ability of industry, government and academic institutions to turn minds and infrastructure into actual activity.

A collaborative and balanced approach, with a focus on non-regulatory tools, is key to the success of such programs. These efforts will take a number of years to establish, making assessment of the current situation an immediate priority.

"Many steps have been taken to minimize waste and improve eco-efficiency but the world does not have environmental problems because of a lack of environmental technology, services or systems. We have environmental problems because available solutions are not used effectively."

The Honourable David Anderson
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Options to address capacity, activity and awareness

- Provide forums/venues for collaboration between government, institutes and industries to clarify and promote the benefits of PSPT.
- Create technology and/or sustainable development chairs at universities.
- Promote a product-centred network of expertise.
- Focus on SMEs which are in the supply chains of priority sectors.
- Provide incentive programs for the development of research projects within industry.
- Promote mechanisms to provide life cycle information to the consumer.
- Encourage the federal government to work with the provinces to provide scholarships and grants for post secondary students to integrate product focused work into their areas of study.
- Establish a professional development budget to train public servants.

Data, Information and Partnerships

Examining environmental aspects of products requires new data sets and enhanced information sharing through new cooperative relationships

among various players in the supply chain. Better linkage of existing data and information sources is required so that decision-makers (i.e. governments, industry and consumers) have appropriate information to improve or foster the environmental performance of products throughout their life cycle.

In many cases, new data will be required. For example, analyzing the environmental aspects of products requires data on materials, energy supply, transportation releases, waste management impacts, manufacturing and measures of risk. It will be important to focus on areas of key environmental impact.

New partnerships that involve stakeholders within specific product supply chains can also offer a means for identifying environmental and economic improvement opportunities.

In addition, the coordination and management of data and information and the establishment of partnerships will need to take many issues (which are discussed at length in the statement paper released after the meeting) into consideration.

Policy Mechanisms and Management Tools

Canada should promote and support the use of PSPT for sustainable development that effectively meets the needs of all stakeholders. There is a wide range of policy mechanisms available to industry and governments to develop and use PSPT for sustainable development. These include voluntary approaches, collaborative research efforts, education and awareness raising activities, regulatory initiatives and economic instruments.

It is recognized that the application of PSPT is new in Canada and that governments and stakeholders need to work together to define the specific objectives for any action taken. In selecting which mechanisms and tools are appropriate, there is a need to consider which ones encourage

Options for the Enhancement of Data, Information and Partnerships

- Establish a coordinating body, organization, centre of excellence to foster, promote and manage data for specific product categories and supply chains.
- Provide government funding to draw ENGOs, academia and industry together.
- Develop research programs to examine PSPT, evaluate various approaches and establish their costs, benefits and potential applications in Canada.
- Establish sector-specific research institutes and share data through partnerships.
- Conduct training and education.
- Arrange alliances along the supply chain.
- Develop voluntary partnerships within product categories and supply chains.
- Identify a lead group to organize and administer the partnerships and then bring in all stakeholders.
- Create government incentives to foster supply chain partnerships, particularly for SMEs.
- Create a national database of information for specific materials and product categories, including material flow and mass balance.
- Establish and maintain good information flow by using existing data and data networks, and establishing new data sources.
- Investigate the potential role for the Internet in sharing data and information.
- Develop software programs to enable decision makers to better integrate available data and information into government and industry decision-making processes.

the desired outcome while maintaining competitiveness. There is also a need for some principles to guide the selection and evaluation of policies and tools. The recommended principles include:

- Developing a process to determine which policy mechanisms and tools should be given priority and applied, which includes the participation of all stakeholders.
- Clearly articulating the scientific and economic rationale for action before action is taken. Governments and government departments must work together.
- Building on experience gained in other countries while respecting the specific needs of Canada.
- Harnessing creativity and innovation from a range of knowledgeable stakeholders and disciplines.
- Evaluating each mechanism on the basis of how much it contributes to meeting the objectives of all relevant parties.
- Identifying existing windows of opportunity in other policy initiatives and industry programs.
- Ensuring that mechanisms and tools respect regional circumstances.

For industry and government, there is a growing set of management systems and tools available to assist them in improving the environmental and economic performance of products and their associated supply chains, such as: environmental management systems; eco-efficiency; life cycle assessment; green procurement; product stewardship and product take-back programs.

In addition, there are several tools available to market and report on the environmental attributes of products and companies, including eco-labeling, performance measures and corporate environmental reporting. The appropriate mix of tools will depend on the industrial sector, the product mix, the market the company sells to and the internal capacity of the organization to take a product-focused perspective. Industrial and governmental actions will be advanced by demonstrating that PSPT are “enlightened self-interest” and by ensuring a level playing field both nationally and internationally.

Conclusions

The significant effort made by the participants over the course of the meeting has provided substantial guidance and direction on PSPT. And although the sponsor of this meeting was Environment Canada, participants noted on a number of occasions that much of the advice generated at the meeting was applicable to all levels of government — federal, provincial/territorial and municipal.

Most of the experts noted that although the government’s vision is one of sustainable development, a gap exists with respect to the policies and tools needed to achieve this vision. Product- and supply chain-focused policies and tools are needed to fill this gap but they must be considered within an overall strategy for sustainable development.

This strategy is necessary to determine the relative importance/priority of PSPT with respect to other policy priorities. In the interim, the link between PSPT and competitiveness, innovation and environmental policy needs to be more fully explored.

Recommendations were also made with respect to making the case for product- and supply chain-focused policy through the development of pilot projects and the documentation of best practices. There is a sense that Canada is behind with respect to our capacity to address this issue and that the process of building capacity must begin soon. This must happen in key academic and government research institutions, and work is needed to develop the data and information necessary to understand and improve products and their supply chains.

The linkage between product- and supply chain-focused policy and competitiveness means that the process for developing specific policy mechanisms will need careful consideration. The experts proposed a set of principles to guide the development of policy mechanisms and the selection of management tools. These principles call for broad stakeholder involvement and the need to consider regional issues.

The drivers for examining PSPT are numerous and there is a need to take immediate action to more fully understand this issue and its importance for Canada. This is particularly true in the context of international trade and the growing application of these tools by Canada's trading partners.

Additionally, barriers exist which will have to be overcome before any potential implications of these drivers can impact governments to achieve industrial competitiveness, stimulate economic and environmental innovation, and design effective environmental policy.

Finally, many of the group discussions at the meeting included recommendations and/or options for various actions which can be undertaken to address the issues discussed. These suggestions are explored at length in the statement paper which was released after the meeting (see the Editor's Column for ordering information).

As a country, we need to develop the right mix of policy and incentives at all levels to break down the barriers to environmental integration.

The Honourable David Anderson
Minister of the Environment

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